

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

- 1-38. (canceled)
39. (withdrawn) A polypeptide having an amino acid sequence as set out in SEQ ID NO:1 from amino acid 37 to 1114, or a sequence having at least 50% identity thereto, or a functional fragment thereof.
40. (withdrawn) The polypeptide, as claimed in claim 39, having a sequence of at least 70% identity with the sequence shown in SEQ ID NO:1 from amino acid 37 to 1114.
41. (withdrawn) The polypeptide, as claimed in claim 39, having a sequence of at least 80% identity with the sequence shown in SEQ ID NO:1 from amino acid 37 to 1114.
42. (withdrawn) The polypeptide, as claimed in claim 39, having a sequence of at least 90% identity with the sequence shown in SEQ ID NO:1 from amino acid 37 to 1114.
43. (withdrawn) A polypeptide, as claimed in claim 39, having protease activity.
44. (withdrawn) A nucleic acid molecule comprising a sequence encoding a polypeptide having an amino acid sequence as set out in SEQ ID NO:1 from

amino acid 37 to 1114, or a sequence having at least 50% identity thereto, or a functional fragment thereof.

45. (withdrawn) A nucleic acid molecule comprising a sequence as set out in SEQ ID NO:2 or a sequence having at least 60% identity thereto, or a sequence which hybridises thereto under stringent conditions.
46. (withdrawn) The nucleic acid molecule, as claimed in claim 45, comprising a sequence having at least 70% identity with the sequence shown in SEQ ID NO:2.
47. (withdrawn) The nucleic acid molecule, as claimed in claim 45, comprising a sequence having at least 80% identity with the sequence shown in SEQ ID NO:2
48. (withdrawn) The nucleic acid molecule, as claimed in claim 45, comprising a sequence having at least 90% identity with the sequence shown in SEQ ID NO:2.
49. (withdrawn) A composition for use in raising an immune response in an animal comprising a polypeptide having an amino acid sequence as set out in SEQ ID NO:1 from amino acid 37 to 1114, or a sequence having at least 50% identity thereto, or a functional fragment thereof and optionally a carrier and/or adjuvant.
50. (withdrawn) A composition for use in raising an immune response in an animal, comprising a nucleic acid sequence encoding a polypeptide having an amino acid sequence as set out in SEQ ID NO:1 from amino acid 37 to 1114, or a sequence having at least 50% identity thereto, or a functional fragment thereof and optionally a carrier and/or adjuvant.
51. (withdrawn) A polypeptide having an amino acid sequence as set out in SEQ ID NO:3 from amino acid 26 to 616, or a sequence having at least 50% identity thereto, or a functional fragment thereof.

52. (withdrawn) The polypeptide, as claimed in claim 51, having a sequence of at least 70% identity with the sequence shown in SEQ ID NO:3 from amino acid 26 to 616.
53. (withdrawn) The polypeptide, as claimed in claim 51, having a sequence of at least 80% identity with the sequence shown in SEQ ID NO:3 from amino acid 26 to 616.
54. (withdrawn) The polypeptide, as claimed in claim 51, having a sequence of at least 90% identity with the sequence shown in SEQ ID NO:3 from amino acid 26 to 616.
55. (withdrawn) The polypeptide, as claimed in claim 51, having lipase activity.
56. (withdrawn) A nucleic acid molecule comprising a sequence encoding a polypeptide having an amino acid sequence as set out in SEQ ID NO:3 from amino acid 26 to 616, or a sequence having at least 50% identity thereto, or a functional fragment thereof.
57. (withdrawn) nucleic acid molecule comprising a sequence as set out in SEQ ID NO:4 or a sequence having at least 60% identity thereto, or a sequence which hybridises thereto under stringent conditions.
58. (withdrawn) The nucleic acid molecule, as claimed in claim 57, comprising a sequence having at least 70% identity with the sequence shown in SEQ ID NO:4.
59. (withdrawn) The nucleic acid molecule, as claimed in claim 57, comprising a sequence having at least 80% identity with the sequence shown in SEQ ID NO:4.

60. (withdrawn) The nucleic acid molecule, as claimed in claim 57, comprising a sequence having at least 90% identity with the sequence shown in SEQ ID NO:4.
61. (withdrawn) A composition for use in raising an immune response in an animal, the composition comprising a polypeptide having an amino acid sequence as set out in SEQ ID NO:3 from amino acid 26 to 616, or a sequence having at least 50% identity thereto, or a functional fragment thereof and optionally a carrier and/or adjuvant.
62. (withdrawn) A composition for use in raising an immune response in an animal, the composition comprising a nucleic acid sequence encoding a polypeptide having an amino acid sequence as set out in SEQ ID NO:3 from amino acid 26 to 616, or a sequence having at least 50% identity thereto, or a functional fragment thereof and optionally a carrier and/or adjuvant.
63. (Currently amended) An isolated A polypeptide ~~having an~~ comprising the amino acid sequence as set out in SEQ ID NO:5, ~~or a sequence having at least 60% identity thereto,~~ or a functional fragment thereof of at least 20 amino acids in length which shows immunological cross-reactivity with said polypeptide.
- 64-65. (canceled)
66. (previously presented) The polypeptide, as claimed in claim 63, having haemolysin activity.
67. (currently amended) An isolated A nucleic acid molecule comprising a sequence encoding a polypeptide having ~~an~~ the amino acid sequence as set out in SEQ ID NO:5, ~~or a sequence having at least 60% identity thereto,~~ or a functional fragment thereof of at least 20 amino acids in length which shows immunological cross-reactivity with said polypeptide .

68. (withdrawn) A nucleic acid molecule comprising a sequence as set out in SEQ ID NO:6 or a sequence having at least 60% identity thereto, or a sequence which hybridises thereto under stringent conditions.
69. (withdrawn) The nucleic acid molecule, as claimed in claim 68, comprising a sequence having at least 70% identity with the sequence shown in SEQ ID NO:6.
70. (withdrawn) The nucleic acid molecule, as claimed in claim 68, comprising a sequence having at least 80% identity with the sequence shown in SEQ ID NO:6.
71. (withdrawn) The nucleic acid molecule, as claimed in claim 68, comprising a sequence having at least 90% identity with the sequence shown in SEQ ID NO:6.
72. (currently amended) A composition for use in raising an immune response in an animal, the composition comprising a polypeptide having ~~an~~ the amino acid sequence as set out in SEQ ID NO:5, ~~or a sequence having at least 60% identity thereto,~~ or a functional fragment thereof of at least 20 amino acids in length which shows immunological cross-reactivity with said polypeptide and optionally a carrier and/or adjuvant.
73. (withdrawn) A composition for use in raising an immune response in an animal, the composition comprising a nucleic acid sequence encoding a polypeptide having an amino acid sequence as set out in SEQ ID NO:5, or a sequence having at least 60% identity thereto, or a functional fragment thereof and optionally a carrier and/or adjuvant.
74. (withdrawn) A composition for use in raising an immune response in an animal directed against *Moraxella*, the composition comprising at least one polypeptide selected from the group consisting of polypeptide as given in SEQ ID NO:1 from

amino acid 37 to 1114, SEQ ID NO:3 from amino acid 26 to 616, and SEQ ID NO:5.

75. (withdrawn) The composition of claim 74 wherein said peptide having at least 50% identity to the peptide selected from the group consisting of a peptide as given in SEQ ID NO:1 from amino acid 37 to 1114, SEQ ID NO:3 from amino acid 26 to 616, and SEQ ID NO:5.
76. (withdrawn) The composition, as claimed in claim 74, the composition comprising a polypeptide having at least 60% identity to the amino acid sequence as given in SEQ ID NO:5 or a functional fragment thereof, and either one of, or preferably both of, a polypeptide having at least 50% identity to the amino acid sequence as given in SEQ ID NO:1 or a functional fragment thereof and a polypeptide having at least 50% identity to the amino acid sequence as given in SEQ ID NO:3 or a functional fragment thereof.
77. (withdrawn) The composition, as claimed in claim 74, wherein the *Moraxella* is *M. bovis* or *M. catarrhalis*.
78. (withdrawn) The composition, as claimed in claim 75, wherein the *Moraxella* is *M. bovis* or *M. catarrhalis*.
79. (withdrawn) The composition, as claimed in claim 76, wherein the *Moraxella* is *M. bovis* or *M. catarrhalis*.
80. (withdrawn) The composition, as claimed in claim 74, wherein the *Moraxella* is *M. bovis*.
81. (withdrawn) The composition, as claimed in claim 75, wherein the *Moraxella* is *M. bovis*.

82. (withdrawn) The composition, as claimed in claim 76, wherein the *Moraxella* is *M. bovis*.
83. (withdrawn) An antibody raised against a polypeptide selected from the group consisting of a polypeptide as given in SEQ ID NO:1 from amino acid 37 to 1114 or a functional fragment thereof, SEQ ID NO:3 from amino acid 26 to 616 or a functional fragment thereof, and SEQ ID NO:5 or a functional fragment thereof.
84. (withdrawn) The antibody of claim 83 wherein said polypeptide has at least 50% identity to the polypeptide as given in SEQ ID NO:1 from amino acid 37 to 1114 or a functional fragment thereof, SEQ ID NO:3 from amino acid 26 to 616 or a functional fragment thereof, and SEQ ID NO:5 or a functional fragment thereof.